Hardware Setup

① Factbird® DUO

② Energy meter (Siemens model 7KT1670 or 7KT1671)	③ MCB Miniature Circuit Breaker	④ Signal cable x1 Wire-ends and an M8 connector	⑤ Power supply unit

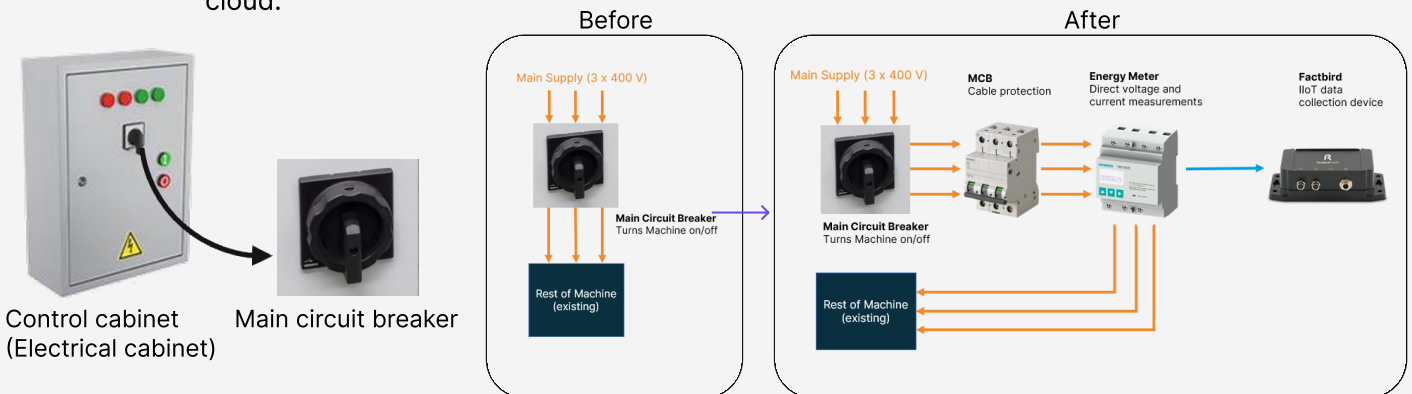Components not provided by Factbird. Please prepare if needed.
- DIN rails, DIN terminal blocks, cable marking labels, cable lugs, various cables/wires to connect the components

Safety information
The installation of energy meter requires qualified personnel. Follow the safety and warning notes in the energy meter's documentation.

Installation overview
- Install the MCB and energy meter in the control cabinet.
- Reroute existing main supply through the energy meter. The energy meter directly measures the current and voltage levels, and Factbird device sends the energy data directly to the cloud.

Before

After

Control cabinet (Electrical cabinet)

Main circuit breaker
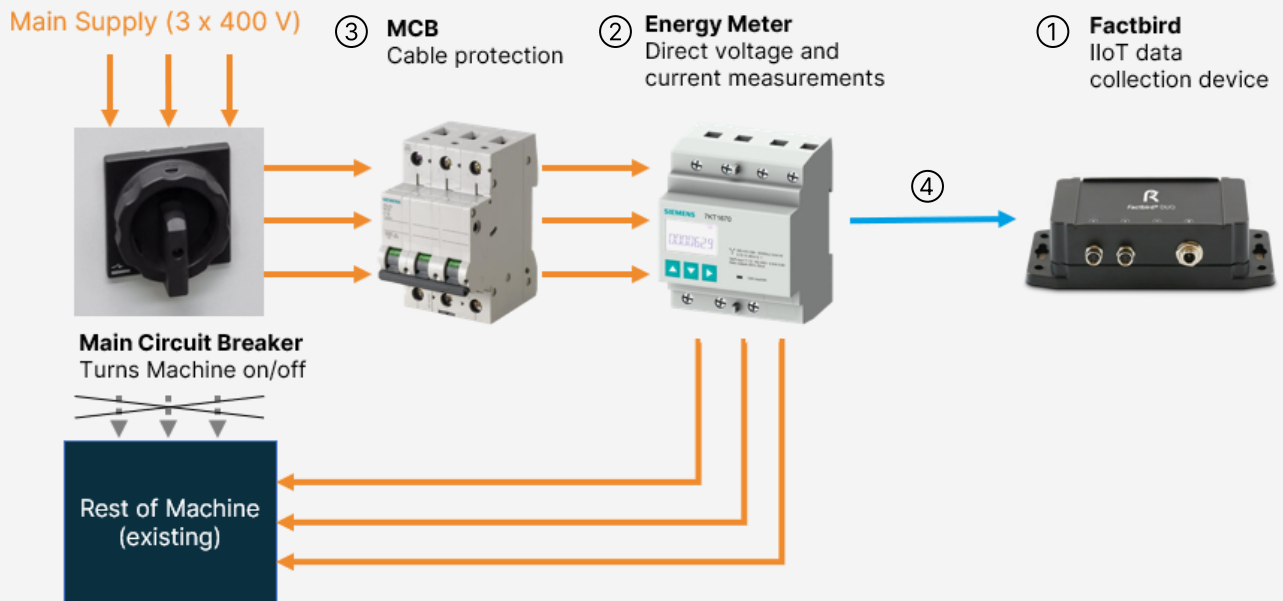
Hardware Setup

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Connecting the machine supply through the MCB and energy meter to the machine

1. Disconnect the main supply after the main circuit breaker but before the machine.
2. Route wires from the main circuit breaker to ③ the MCB.
3. Connect wires of appropriate dimensions from ③ the MCB to ② the energy meter.
4. Connect wires of appropriate dimensions from ② the energy meter to the machine.

Connecting the energy meter to the Factbird device

5. Connect the open ends of ④ the wires to the energy meter's screw terminals, with the brown wire to 01+ output and the black wire to 01- output. Connect the M8 connector to ① the Factbird® devices.
6. Connect ⑤ power supply unit to ① Factbird® devices and plug into power.

Main Supply (3 x 400 V) ③ **MCB** Cable protection ② **Energy Meter** Direct voltage and current measurements ① **Factbird** IIoT data collection device

Main Circuit Breaker Turns Machine on/off

Rest of Machine (existing)

Please refer to the installation guide of Siemens devices for connection details, e.g. circuit diagram and tightening torque.

Hardware Setup

2

Configuring energy meter

On the energy meter, use the up and down arrow keys to navigate the menu, and use the right arrow to select a setting or confirm a value. Enter the setup menu by pressing and holding the up and down arrow keys simultaneously for 5 seconds.

For setting up model 7KT1670 or 7KT1671:

1. Press and hold the up and down arrow keys simultaneously for 5 seconds to enter the menu.
2. Press down to find "SETUP" and select it.
3. Scroll down and select "P2-01" (Function of output 1).
4. Adjust the value to "1000PUL" (1000 pulses per kWh) and confirm.

The energy meter will return to the main screen after some time (alternatively, press and hold the up and down arrow keys simultaneously for 2 seconds).

Arrow keys to configure →

Software setup

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1. You'll receive a welcome email from Factbird.
2. Open the email and create your password according to the instruction in the email.
3. Log into the Factbird application and view your production data at: **cloud.factbird.com**

For more details, see the guide at
factbird.com/resources/getting-started

How to make a short cut

For smartphone and tablet user, set Factbird icon on your home screen for quicker access.

iOS

1. Log in to **cloud.factbird.com**, tap the *Share* icon in the menu bar at the bottom.
2. Tap *Add to Home Screen* in the menu, and tap *Add* again.

android

1. Log in to **cloud.factbird.com**, tap the *three vertical dots* in the upper right corner.
2. Tap *Add to Home Screen* in the menu, and tap *Add* again.